



"VERSION WITH MARKINGS TO SHOW CHANGES MADE"

IN THE ABSTRACT:

The abstract of the disclosure has been amended as follows:

112 A linear motion mechanism comprises a supersonic motor having a rotor which is rotationally driven by vibration of a vibrating body having a piezoelectric element. [having a shaft, a vibrating body supported by the shaft, a piezoelectric element having an electrode pattern and being driven by a voltage signal to undergo expansion and compression movement to vibrationally drive the vibrating body, and a rotor disposed on the vibrating body for undergoing rotation about a longitudinal axis of the shaft in accordance with vibration of the vibrating body.] A transmission mechanism is disposed on [connected to] the rotor for rotation therewith. A moving body undergoes linear movement in a direction crosswise to [the] a longitudinal axis of [the] a rotational shaft of the rotor in accordance with rotation of the transmission mechanism. A pressurizing mechanism presses the moving body into pressure contact with the transmission mechanism.

IN THE CLAIMS:

Claims 29, 36, 42, 46, 49 and 50 have been amended as follows:

29. (Amended) A linear motion mechanism comprising:
a supersonic motor having a rotor which is rotationally driven by vibration of a vibrating body having a piezoelectric element; [having a shaft, a vibrating body supported by the shaft, a piezoelectric element having an electrode pattern and being driven by a voltage signal to undergo expansion and compression movement to vibrationally drive the vibrating body, and a rotor disposed on the vibrating body for undergoing rotation about a longitudinal axis of the shaft in accordance with vibration of the vibrating body;]

a transmission mechanism disposed on [connected to] the rotor for rotation therewith;

a moving body for undergoing linear movement in a direction crosswise to [the] a longitudinal axis of [the] a rotational shaft of the rotor in accordance with rotation of the transmission mechanism; and

a pressurizing mechanism for pressing the moving body into pressure contact with the transmission mechanism.

Structure
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36. (Amended) A linear motion mechanism comprising:
a supersonic motor having a rotor which is
rotationally driven by vibration of a vibrating body having a
piezoelectric element; [having a shaft, a vibrating body
supported by the shaft, a piezoelectric element having an
electrode pattern and being driven by a voltage signal to
undergo expansion and compression movement to vibrationally
drive the vibrating body, and a rotor disposed on the
vibrating body for undergoing rotation about a longitudinal
axis of the shaft in accordance with vibration of the
vibrating body;]

a transmission member [connected to] disposed on the
rotor for rotation therewith, the transmission member having a
tapered portion varying in thickness along a direction
generally perpendicular to [the] a longitudinal axis of a
rotational [the] shaft of the rotor;

a moving body having an end portion in contact with
the transmission member for undergoing linear movement in a
direction generally parallel to the longitudinal axis of the
rotational shaft in accordance with rotation of the
transmission member; and

a pressurizing mechanism for pressing the moving
body into pressure contact with the transmission member.

42. (Amended) A linear motion mechanism comprising:
a supersonic motor having a rotor which is rotationally driven by vibration of a vibrating body having a piezoelectric element; [having a shaft, a vibrating body supported by the shaft, a piezoelectric element having an electrode pattern and being driven by a voltage signal to undergo expansion and compression movement to vibrationally drive the vibrating body, and a rotor disposed on the vibrating body for undergoing rotation about a longitudinal axis of the shaft in accordance with vibration of the vibrating body;]

a first transmission member connected to the rotor for rotation therewith;

a second transmission member having a first end portion for contacting the first transmission member and a second end portion, the second transmission member being mounted for undergoing pivotal movement about a pivoting point disposed between the first and second end portions;

a moving body for contacting the second end portion of the second transmission member upon pivotal movement thereof to undergo linear movement in a direction crosswise to [the] a longitudinal axis of [the] a rotational shaft of the rotor in accordance with rotation of the first transmission member; and

a pressurizing mechanism for pressing the moving body into pressure contact with the second end portion of the second transmission member.

46. (Amended) A pivotal motion mechanism comprising:

a supersonic motor having a rotor which is rotationally driven by vibration of a vibrating body having a piezoelectric element; [having a shaft, a vibrating body supported by the shaft, a piezoelectric element having an electrode pattern and being driven by a voltage signal to undergo expansion and compression movement to vibrationally drive the vibrating body, and a rotor disposed on the vibrating body for undergoing rotation about a longitudinal axis of the shaft in accordance with vibration of the vibrating body;]

a transmission member connected to the rotor for rotation therewith;

a moving body mounted for undergoing pivotal movement about a pivot point in accordance with rotation of the transmission member; and

a pressurizing mechanism for pressing the moving body into pressure contact with the transmission member.

Fig 1A

49. (Amended) A linear motion mechanism comprising:
a supersonic motor having a rotor which is
rotationally driven by vibration of a vibrating body having a
piezoelectric element; [having a shaft, a vibrating body
supported by the shaft, a piezoelectric element having an
electrode pattern and being driven by a voltage signal to
undergo expansion and compression movement to vibrationally
drive the vibrating body, a rotor disposed on the vibrating
body for undergoing rotation about a longitudinal axis of the
shaft in accordance with vibration of the vibrating body, and
a first pressurizing mechanism for pressing the vibrating body
into pressure contact with the rotor;]

a rotational body connected to the rotor for
rotation therewith, the rotational body having a tapered
portion varying in thickness along a direction generally
perpendicular to [the] a longitudinal axis of [the] a
rotational shaft of the rotor;

a moving body having a projecting portion for
contacting the tapered portion of the rotational body to
undergo linear movement in a direction generally parallel to
the longitudinal axis of the rotational shaft in accordance
with rotation of the rotational body;

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a second pressurizing mechanism for pressing the
projecting portion of the moving body into pressure contact
with the tapered portion of the rotational body;

a support member for supporting the supersonic motor; and

a guide member mounted on the support member for guiding the linear movement of the moving body.

50. (Amended) A linear motion mechanism comprising:

[a support member;

a shaft mounted on the support member;

a vibrating body for undergoing vibration;

a stator mounted on the support member for vibrating the vibrating body;

a rotor disposed on the vibrating body for undergoing rotation about a longitudinal axis of the shaft in accordance with vibration of the vibrating body;]

a supersonic motor having a rotor which is rotationally driven by vibration of a vibrating body having a piezoelectric element;

a first pressing member for pressing the rotor into pressure contact with the vibrating body;

a rotational body connected to the rotor for rotation therewith, the rotational body having a tapered portion varying in thickness along a direction generally perpendicular to [the] a longitudinal axis of [the] a rotational shaft of the rotor;

a moving body having a projecting portion for contacting the tapered portion of the rotational body to undergo linear movement toward and away from the support member in a direction generally parallel to the longitudinal axis of the rotational shaft in accordance with rotation of the rotational body;

a moving member connected to the moving body for undergoing linear movement therewith;

a guide member mounted on the support member for guiding the linear movement of the moving body and the moving member; and

a second pressing member for pressing the projecting portion of the moving body into pressure contact with the tapered portion of the rotational body[;].